IN0000337
Porter Co

United States Steel Corporation Gary Works
1 North Broadway, MS 70-A
Gary, IN 46402

VIA CERTIFIED MAIL

January 24, 2017

Dave Greinke
Office of Emergency Response
Indiana Department of Environmental Management
100 North Senate Avenue – Post Office Box 6015
Indianapolis, IN 46206

Re: United States Steel Corporation – Midwest Plant
Hexavalent Chromium Daily Max Limit Exceedance at Bubble Outfall 304

Dear Mr. Greinke,

This letter is to serve as a follow up to the phone call that was placed to the IDEM Emergency Response Office on Friday, January 20, 2017 regarding the Exceedance of the daily maximum limit at Bubble Outfall 304 for hexavalent chromium on the January 12, 2017 sampling event at the U. S. Steel – Midwest plant. Bubble Outfall 304 is a mathematically calculated combination of Internal Outfalls 104 and 204. Internal Outfall 104 is designed to receive the treated non-chrome contaminated wastewaters from all of the operations at the facility, and Internal Outfall 204 is comprised only of the effluent of the Chrome Treatment Plant, which is the wastewater treatment facility designed specifically to receive and treat chrome contaminated process water.

The January 12, 2017 sample for hexavalent chromium at Internal Outfall 104 was taken and analyzed by utilizing permit specified method EPA Method 218.6 by ALS Laboratory. The result was 0.033 mg/L, which after factoring in flow resulted in a loading of 2.371 lbs/day. There is no limit for hexavalent chromium at Internal Outfall 104; however, the calculated result at Bubble Outfall 304 for hexavalent chromium was 0.033 mg/L and 2.371 lbs/day. The daily maximum limit is 0.51 lbs/day at Bubble Outfall 304. There is no concentration limit.

The permit specified sampling method for hexavalent chromium is a grab sample. A composite sample taken on the same day and analyzed for Total Chromium resulted in a concentration of 0.027 mg/L, which when accounting for flow resulted in a loading of 1.97 lbs/day. This result is within the normal range for total chromium, and no corresponding spike in total chromium was observed on January 12, 2017. With such a high result for hexavalent chromium on January 12, U. S. Steel would have expected to see a significant spike in the total chromium result on the same day should there have been an ongoing release of hexavalent chromium through Outfall 104. This leads U. S. Steel to believe that the nature of the source of the hexavalent chromium which caused the exceedance to be transient, and not an ongoing or continuous issue.

This analytical result was received by U. S. Steel on January 20, 2017, at which time investigation into the cause of the exceedance immediately began. U. S. Steel had the sample rerun to verify the initial result. The rerun resulted in the same concentration. U. S. Steel Environmental Control personnel met with operating and maintenance management and reviewed operating logs and turn sheets from January 12. This review indicated nothing unusual that would have contributed to the exceedance. U. S. Steel Environmental Control personnel, along with operating and maintenance management, performed a thorough walkthrough of the Eletrolytic Tinning Line basement, Tin-free Steel line (Chrome line) basement, the 72" Galavnizing line, the #3 Galvanizing line and all associated process tanks and piping that could potentially contain or convey chromium contaminated process materials or wastewater. Additionally a thorough walkthrough was performed of the Final Treatment wastewater treatment plant, the discharge of which makes up Internal Outfall

104. These walkthrough inspections did not result in finding any abnormal conditions which might explain the exceedance.

The January 19, 2017 sampling event for hexavalent chromium at Internal Outfall 104 came back non-detect. The final concentration and loading at Bubble Outfall 304 from this sampling event were <0.000055 mg/L and <0.004 lbs/day respectively. This provides further evidence of the transient nature of the issue which caused the exceedance on January 12, 2017.

As a result of the transient nature of the issue which caused the elevated result on January 12, U. S. Steel management is committed to performing a comprehensive review on all potential sources and routes of possible chromium contamination of wastewater discharge.

Should any new information relevant to the January 12 exceedance become apparent, U. S. Steel will evaluate that information as part of the investigation into the source of the hexavalent chromium. However, at this time the investigation into the source of the chromium is inconclusive.

If you have questions or concerns regarding this matter, please do not hesitate to contact me at 219-888-4793 or via electronic mail at BSMiller@uss.com

Sincerely,

Brandon Miller

Brandon S. Miller
Environmental Compliance
United States Steel Corporation
Gary Works, Midwest Plant, East Chicago Tin